



CROSS-BORDER LANDSCAPE CHARACTER ASSESSMENT: WEST-FLANDERS (BELGIUM) AND NORD-PAS-DE-CALAIS (FRANCE)

Veerle Van Eetvelde & Niels Dabaut

Department of Geography, Ghent University, (Belgium)



INTRODUCTION

- ▶ **Landscape characterisation** – increased attention since **ELC** -> National and Regional examples across Europe
- ▶ Landscape classification and characterisation in Flanders and Belgium
- ▶ How to apply this in a transborder context?

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Transborder context:

- Different policy and legislation
- Different visions and approaches to landscape
- Data collection and usage are different
- Data coverage for the regions is not coherent

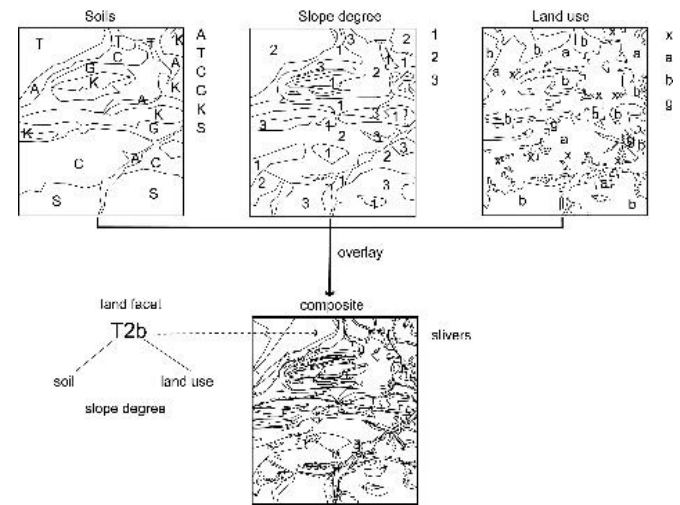
CHALLENGES AND ISSUES

- ▶ Integration of data sources at **different scale levels** and with **different data quality**
- ▶ Development of a **common language of understanding**
 - Across regions (Flanders, France,...)
 - Across disciplines (Geography, Archaeology, Planning,...)
- ▶ **Visualisation** of the characterisation (maps, interactive viewers,...)
- ▶ Towards strategic and **policy supportive** products
- ▶ Recognisable and **readable for lay people**

METHODOLOGICAL BACKGROUND

► Holistic vs **Parametric** approach:

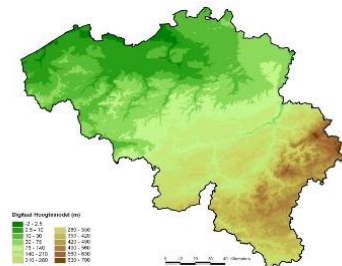
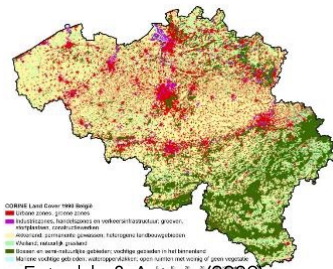
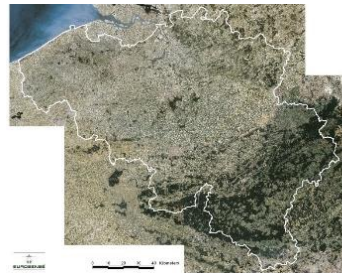
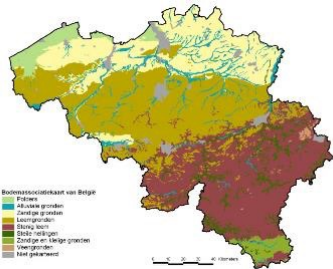
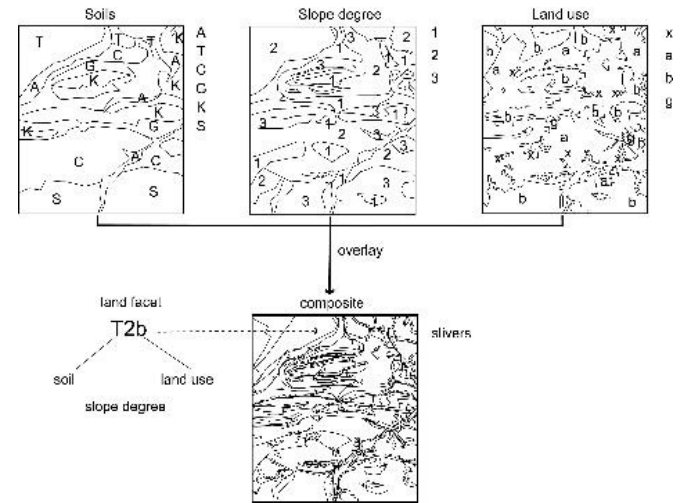
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- Overlay of **poly-thematic** layers
- Grouping of spatial units
- Quantitative and digital spatial data is required



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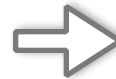
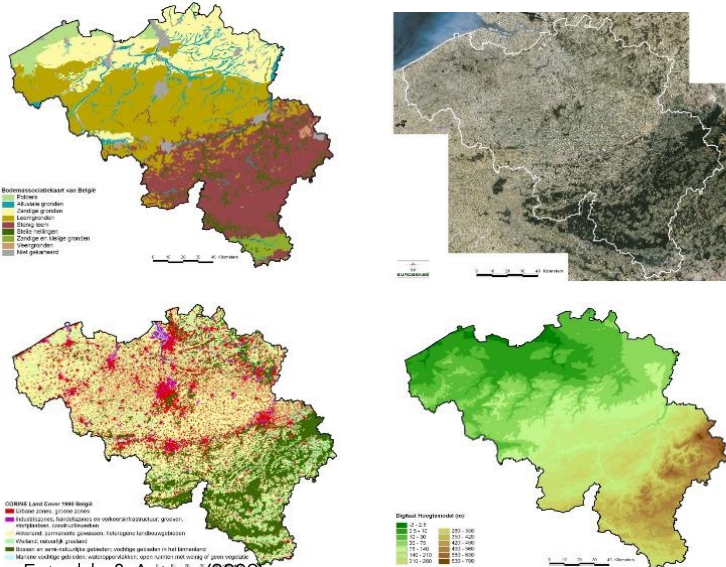
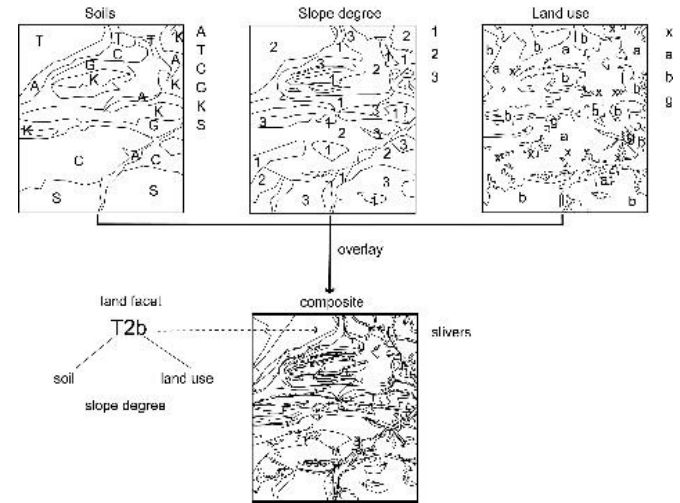
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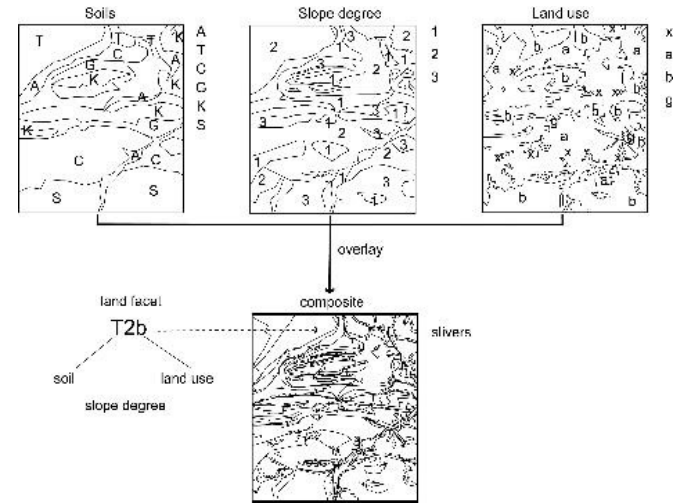
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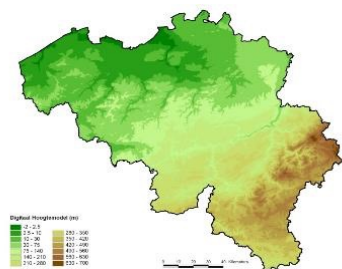
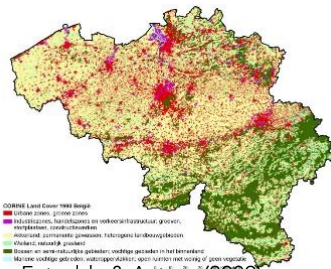
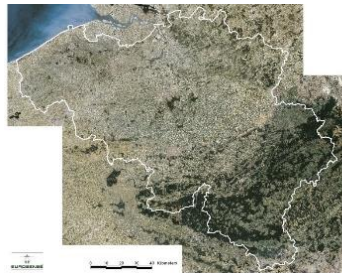
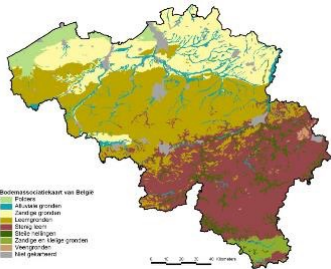
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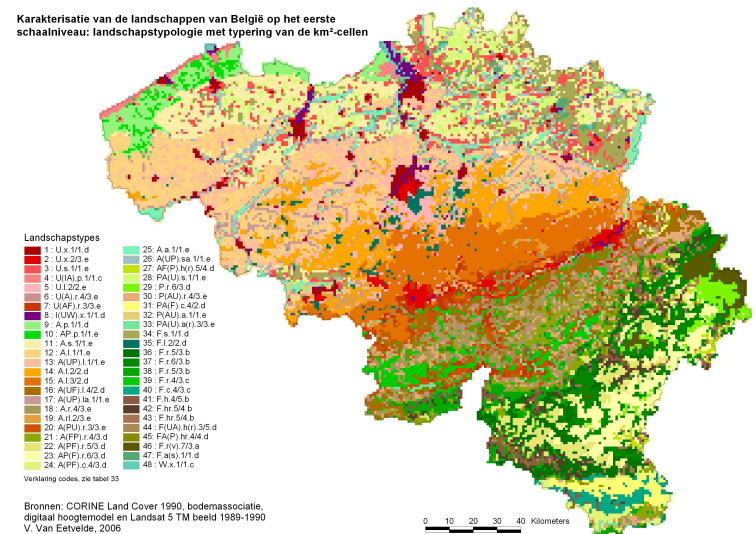
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Van Eetvelde & Antrop (2009)



Karakterisatie van de landschappen van België op het eerste schaalniveau: landschapstypologie met typering van de km²-cellen

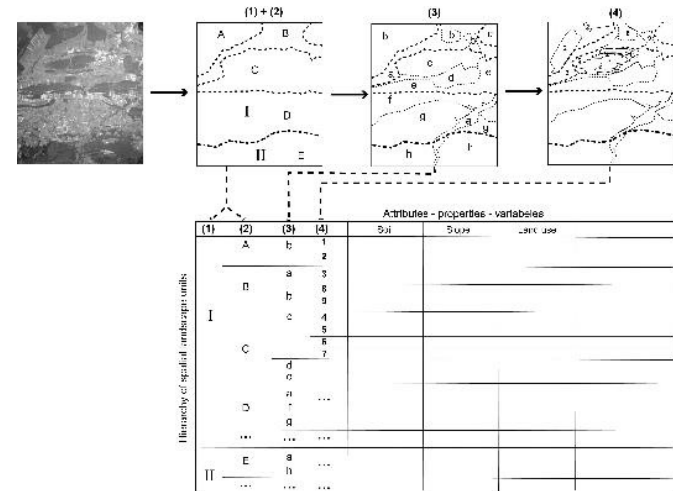


Bronnen: CORINE Land Cover 1990, bodemassociatie, digitaal hoogtemodel en Landsat 5 TM beeld 1989-1990 V. Van Eetvelde, 2006

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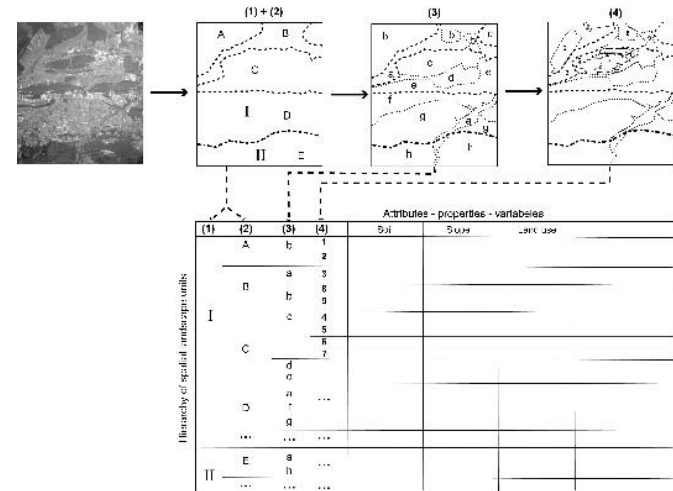
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- Data sources with synoptic view
 - Based on the 'Gestalt'-principles
 - Using different additional thematic data



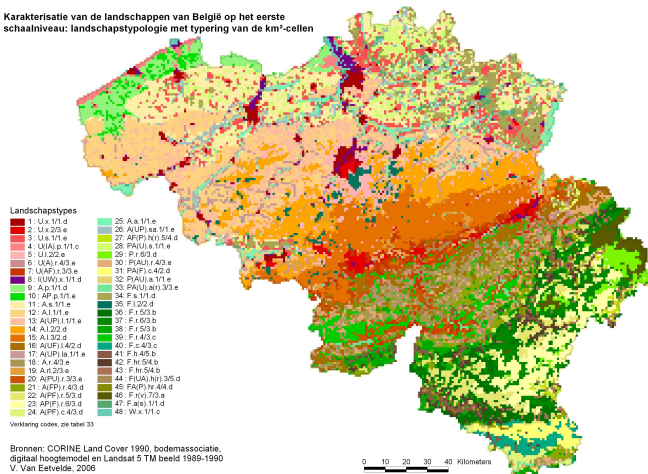
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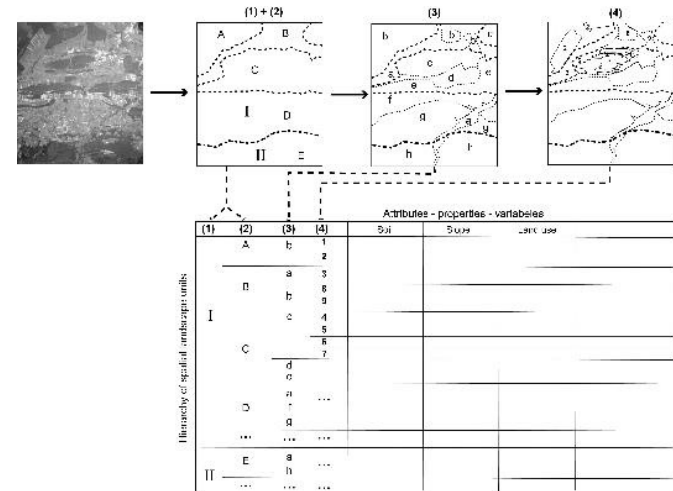


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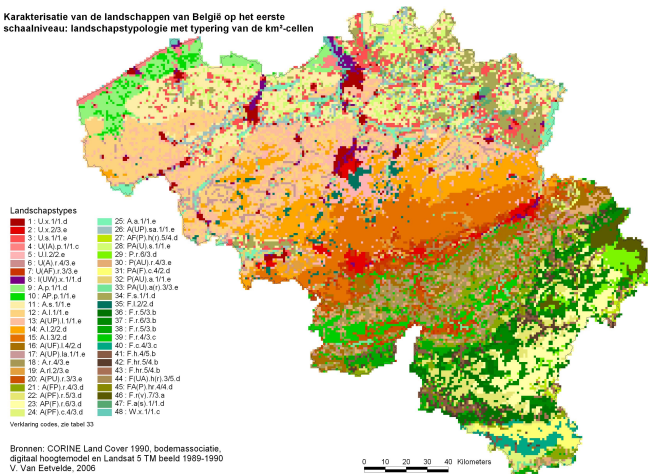
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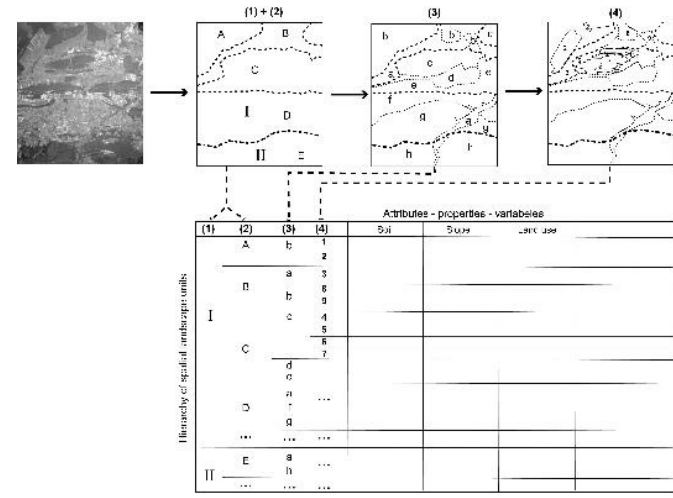
Interpretation



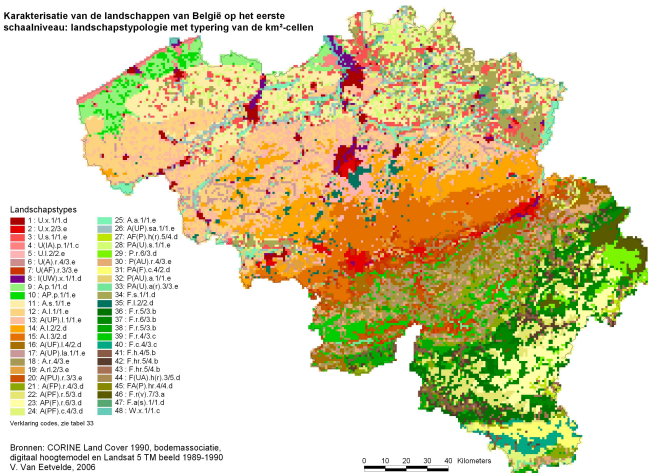
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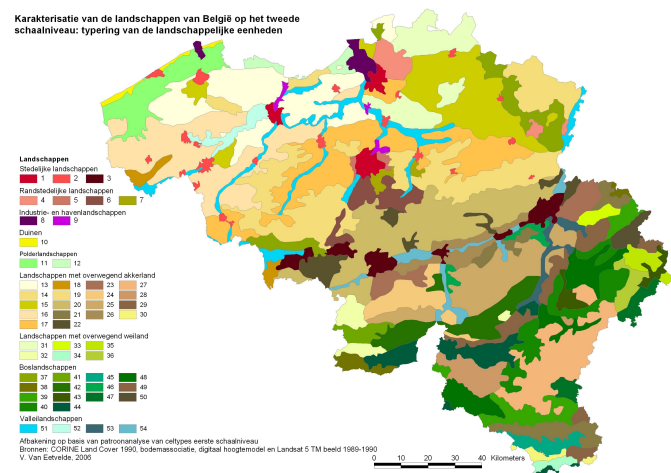
Karakterisatie van de landschappen van België op het eerste schaalniveau; landschapstypologie met typering van de km²-cellen



Interpretation



Karakterisatie van de landschappen van België op het tweede schaalniveau; typering van de landschappelijke eenheden



HIERARCHICAL SCALES IN CLASSIFICATION

Land Unit	Characteristics	Scale
site, geotoop	smallest tract of land allowing an description	1/10.000
land facet	unique combination of slope, substrate (soil) and land cover/land use	1/10.000-
land catena	toposequence of land facets	1/50.000
land system	spatial and functional associations of land facet and/or -catenas	1/50.000- 1/100.000
land region	unique spatial and geographical association of land systems	1/100.000-
land provincie	contiguous land regions with a common genesis or history	1/1.000.000
land division	large geographical units based on landform and geology	< 1/1.000.000
land zone	climatic and vegetation zones	

CASE STUDY PROJECT

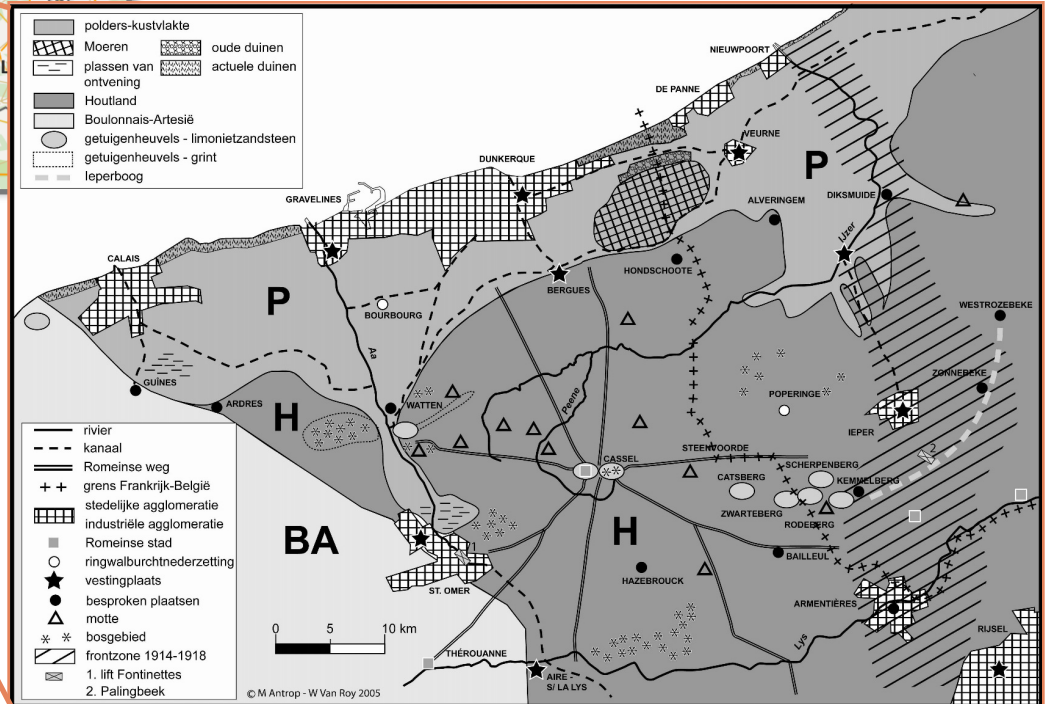
► Project:

- **Landscape characterisation** of the cross border area between West-Flanders and the northern part of the Nord-pas-de-Calais Region
- Creating a common understanding in both disciplines and regions
- Development of similar names for specific regions, comprehensible across the borders



► Partners:

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- Conseil d'architecture, d'urbanisme et de l'environnement du Nord (CAUE)
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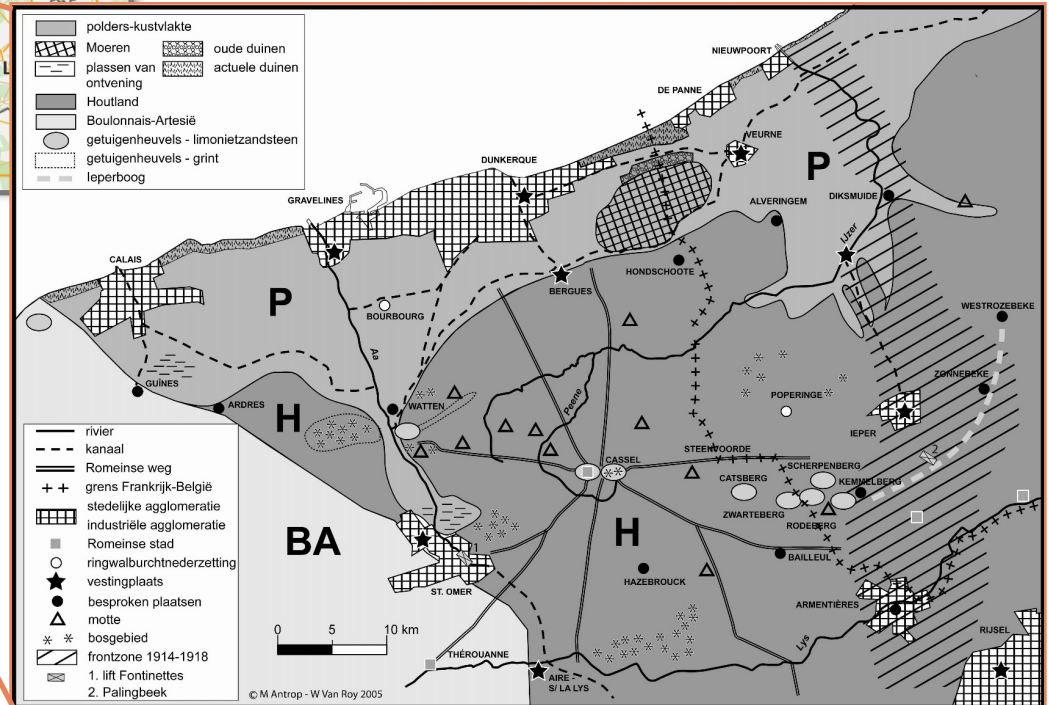
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Google Maps (2015)

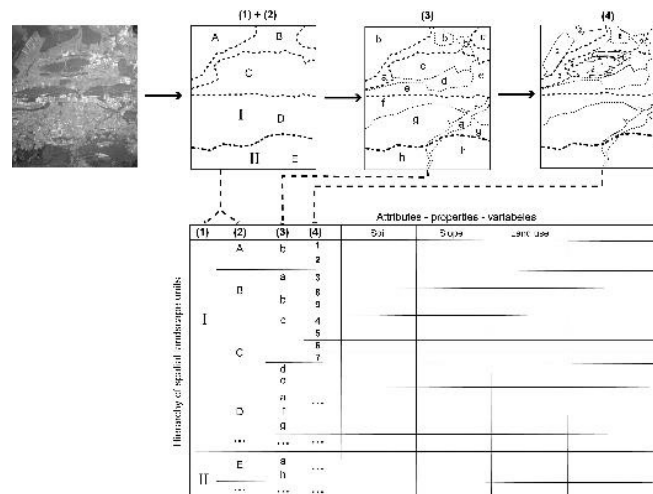
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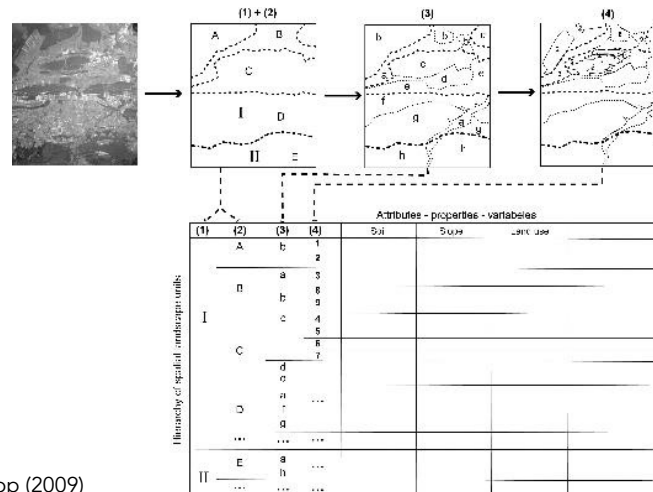
CASE STUDY APPROACH

- ▶ **Holistic approach** and manual interpretation
- ▶ Defining **hierarchical scales** to define landscape units
- ▶ **Subdividing** the large units into smaller units
- ▶ Describing and analysing landscape units in a **GEO-database**
- ▶ Besides a desktop study a **more detailed field study** to verify the previous steps
- ▶ Adding **characterising pictures** to the different units within the database



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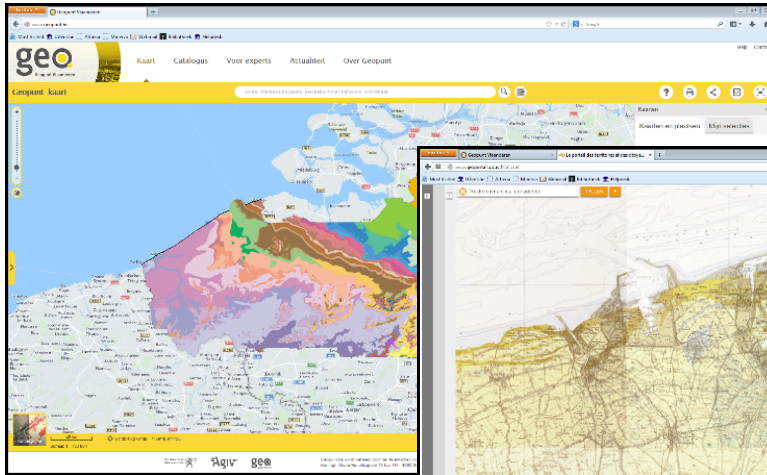
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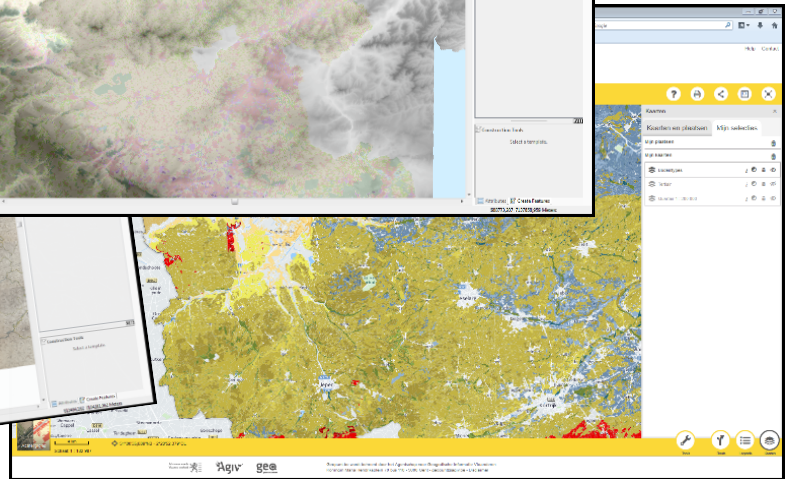
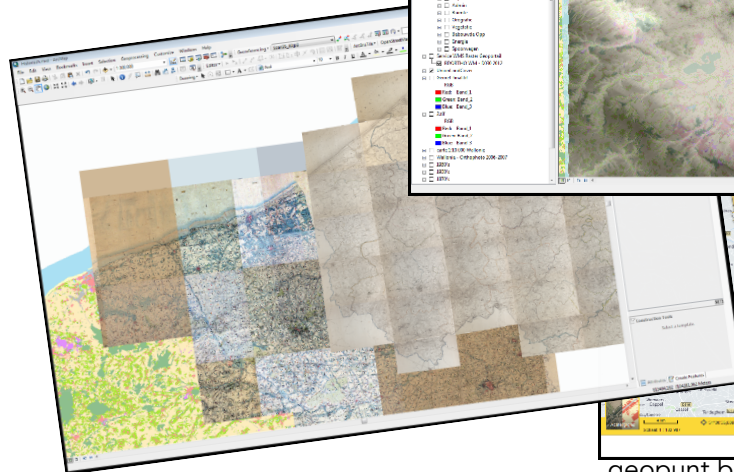
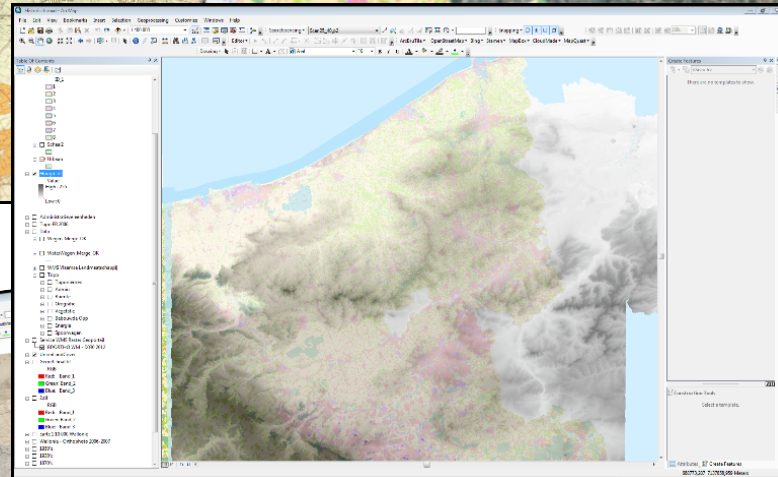
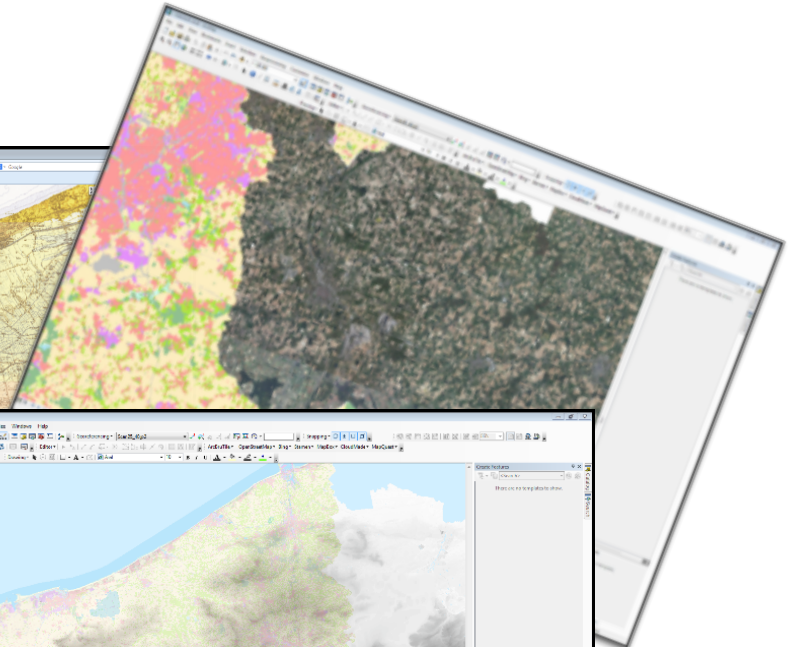
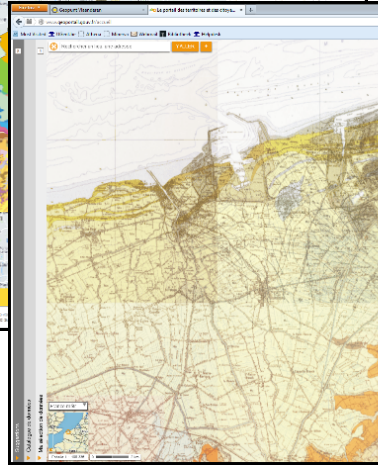
HIERARCHICAL SCALES AND THEIR ATTRIBUTES

- ▶ **First Scale:** Landscape Region -> Geology, soils, (topography)
- ▶ **Second Scale:** Landscape 'Systems' -> Land cover, land use, cultural history,...
- ▶ **Third Scale:** Landscape Units -> Field structure, visual characteristics

HOLISTIC INTERPRETATION OF THE LANDSCAPE



geopunt.be

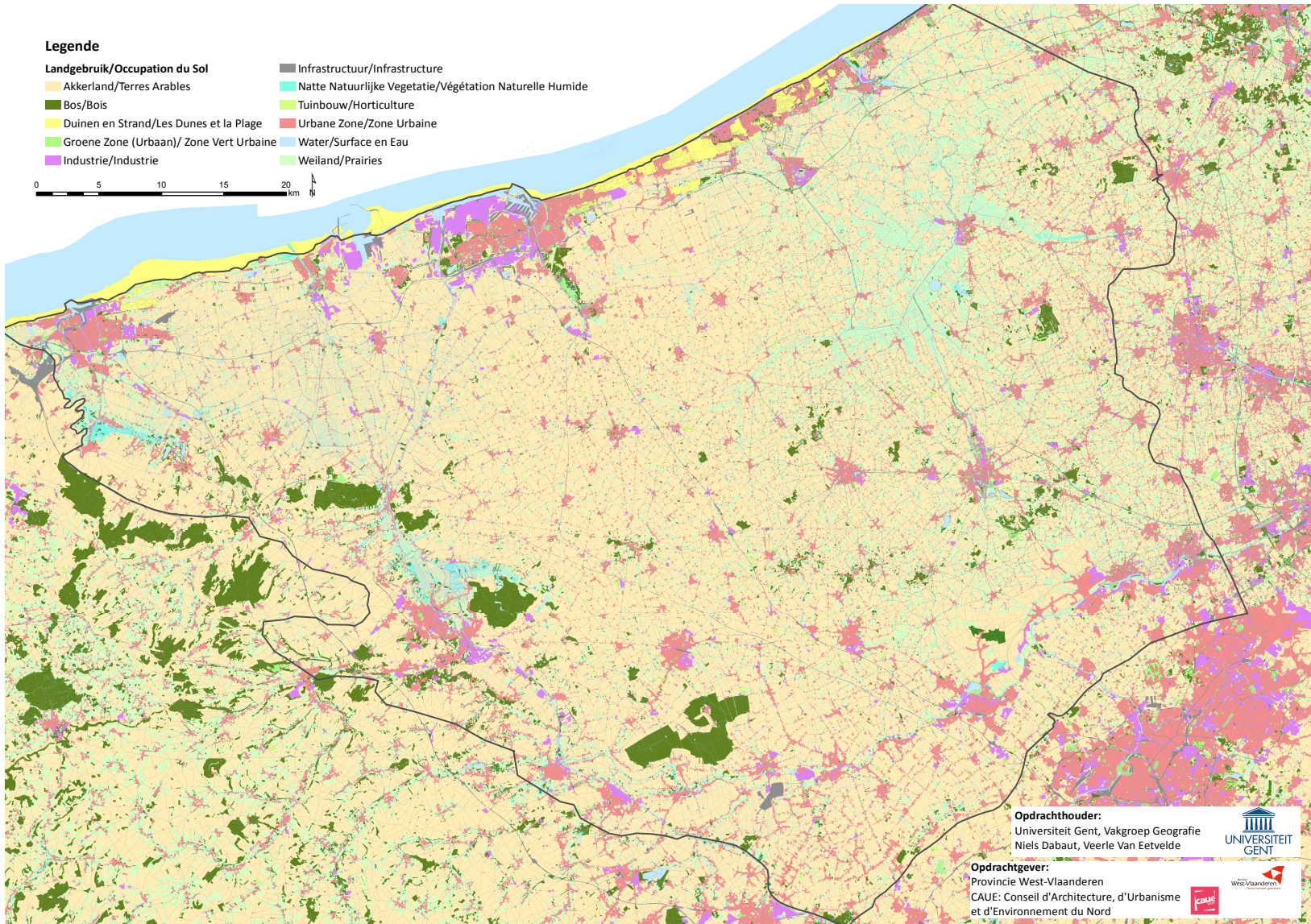


geopunt.be

► Interpretation of different maps and Web Viewers:

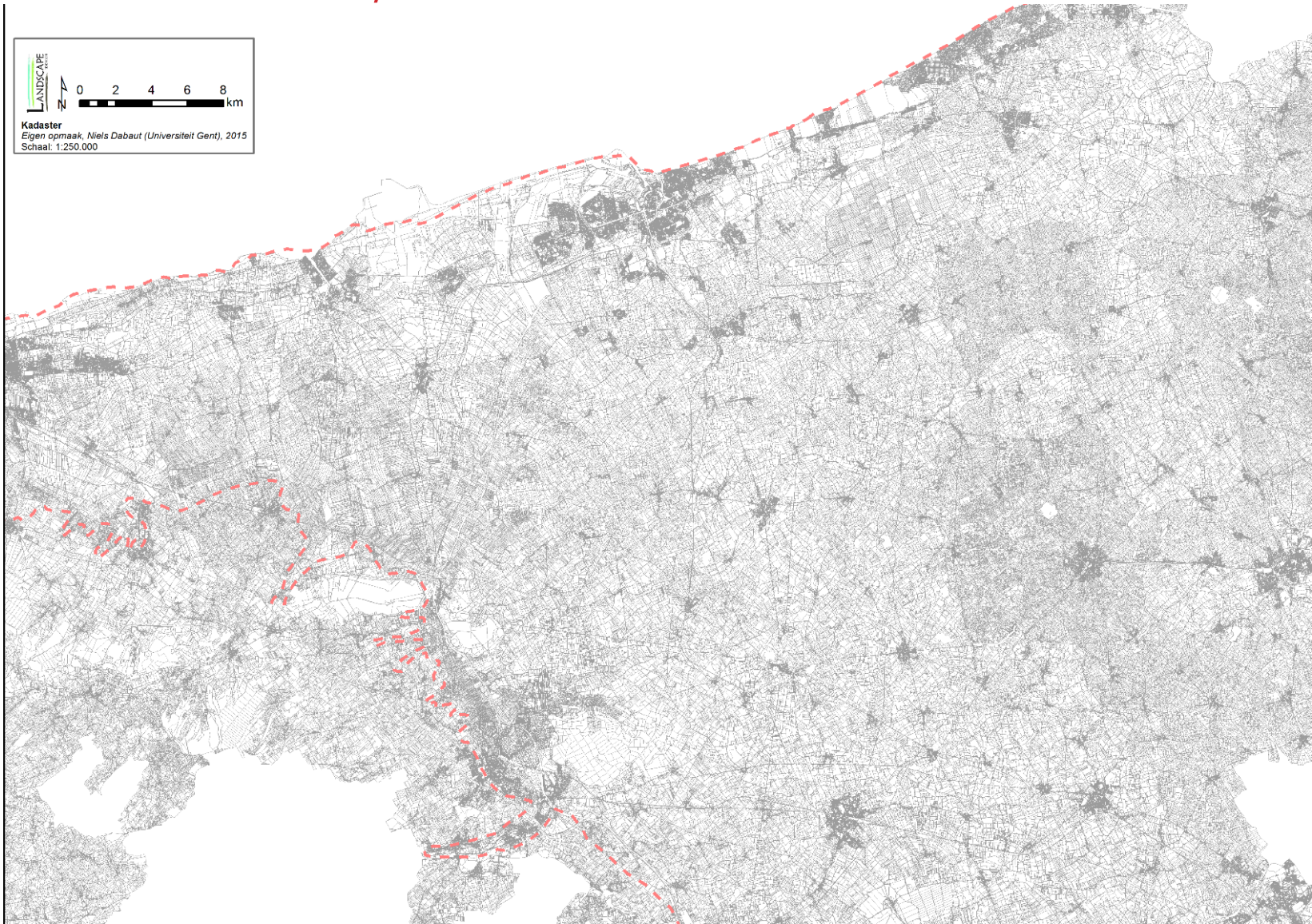
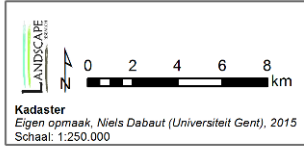
- Geological Maps
- DTM
- Soil Maps
- Historical Maps
- Aerial Pictures
- Written sources
- ...

LANDCOVER, DEFINING A SECOND SCALE

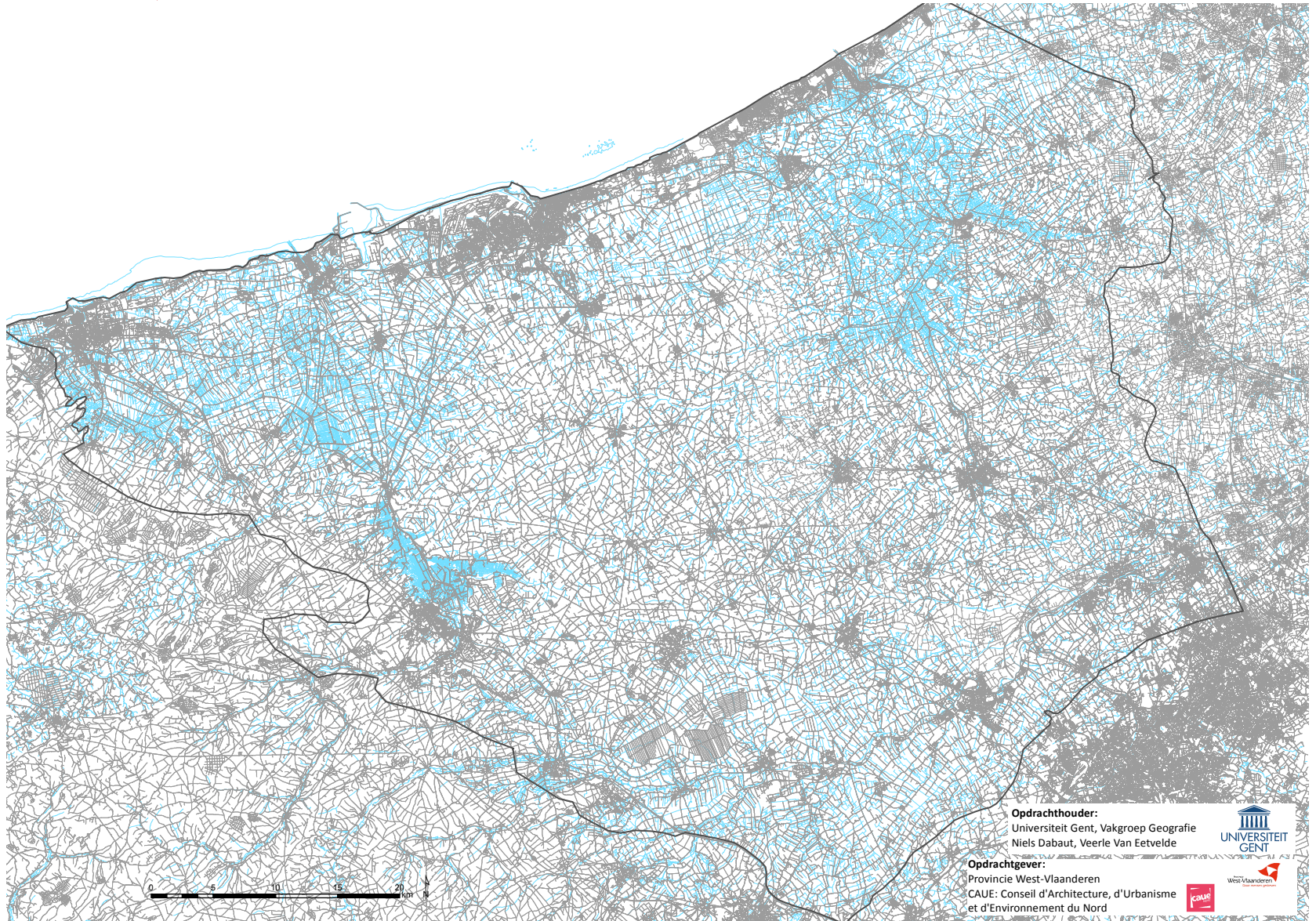


From different legends in both regions to one legend for a project

CADASTRAL MAP, DEFINING A THIRD SCALE



(WATER)WAYS, DEFINING A THIRD SCALE

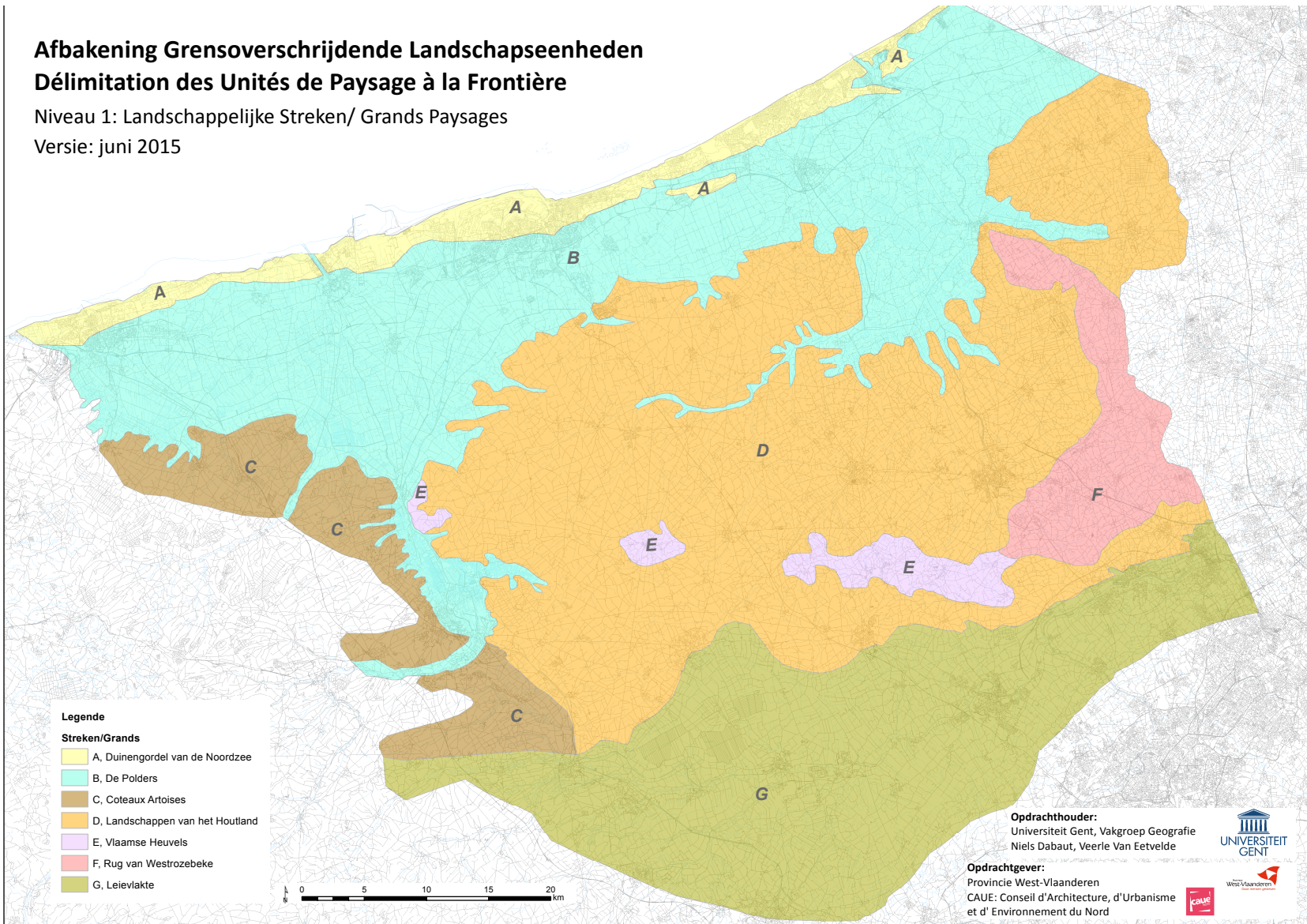


FIRST SCALE: LANDSCAPE REGIONS

Afbakening Grensoverschrijdende Landschapseenheden Délimitation des Unités de Paysage à la Frontière

Niveau 1: Landschappelijke Streken/ Grands Paysages

Versie: juni 2015

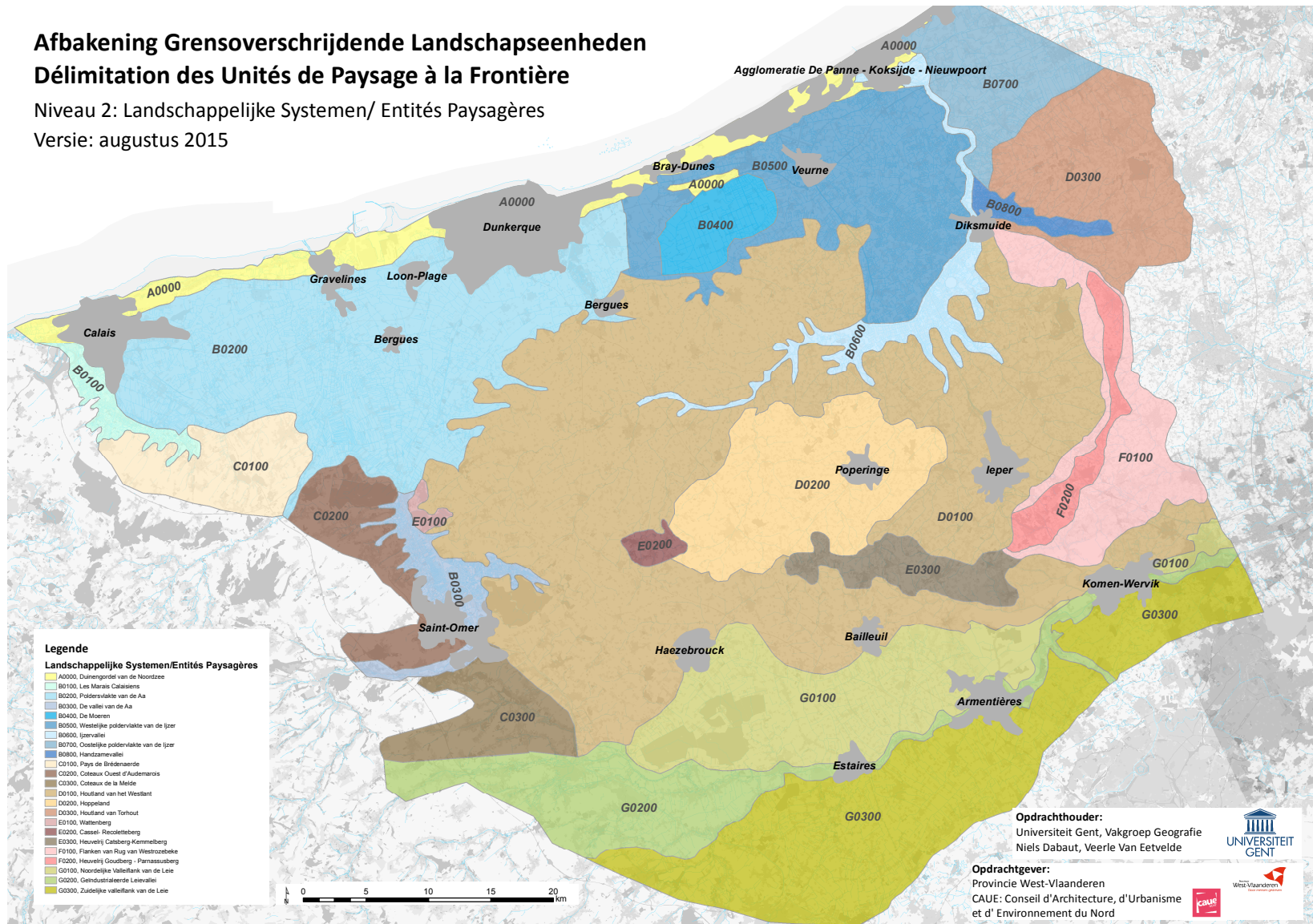


SECOND SCALE: LANDSCAPE SYSTEMS

Afbakening Grensoverschrijdende Landschapseenheden Délimitation des Unités de Paysage à la Frontière

Niveau 2: Landschappelijke Systemen/ Entités Paysagères

Versie: augustus 2015



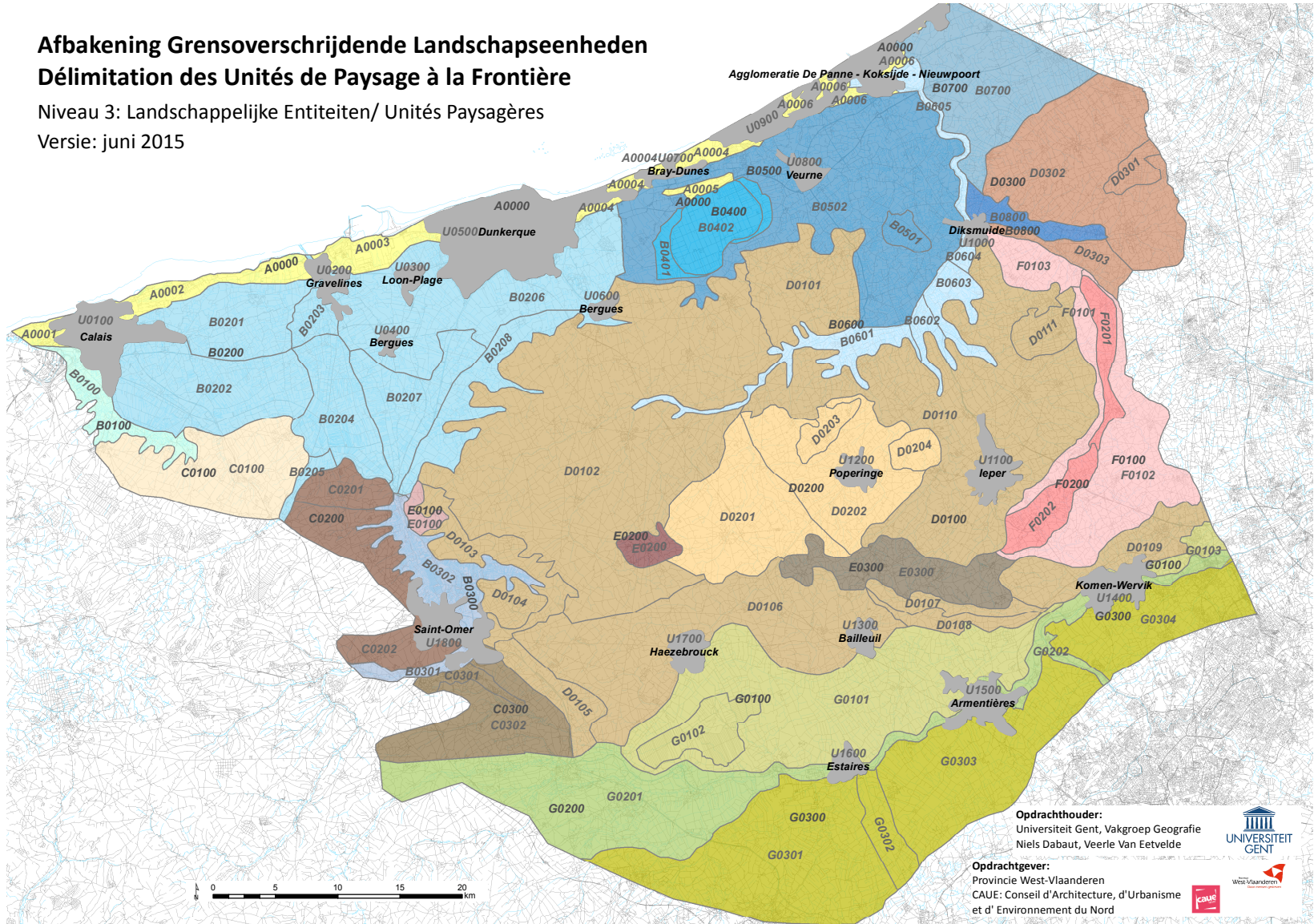
THIRD SCALE: LANDSCAPE UNITS

Afbakening Grensoverschrijdende Landschapseenheden

Délimitation des Unités de Paysage à la Frontière

Niveau 3: Landschappelijke Entiteiten/ Unités Paysagères

Versie: juni 2015

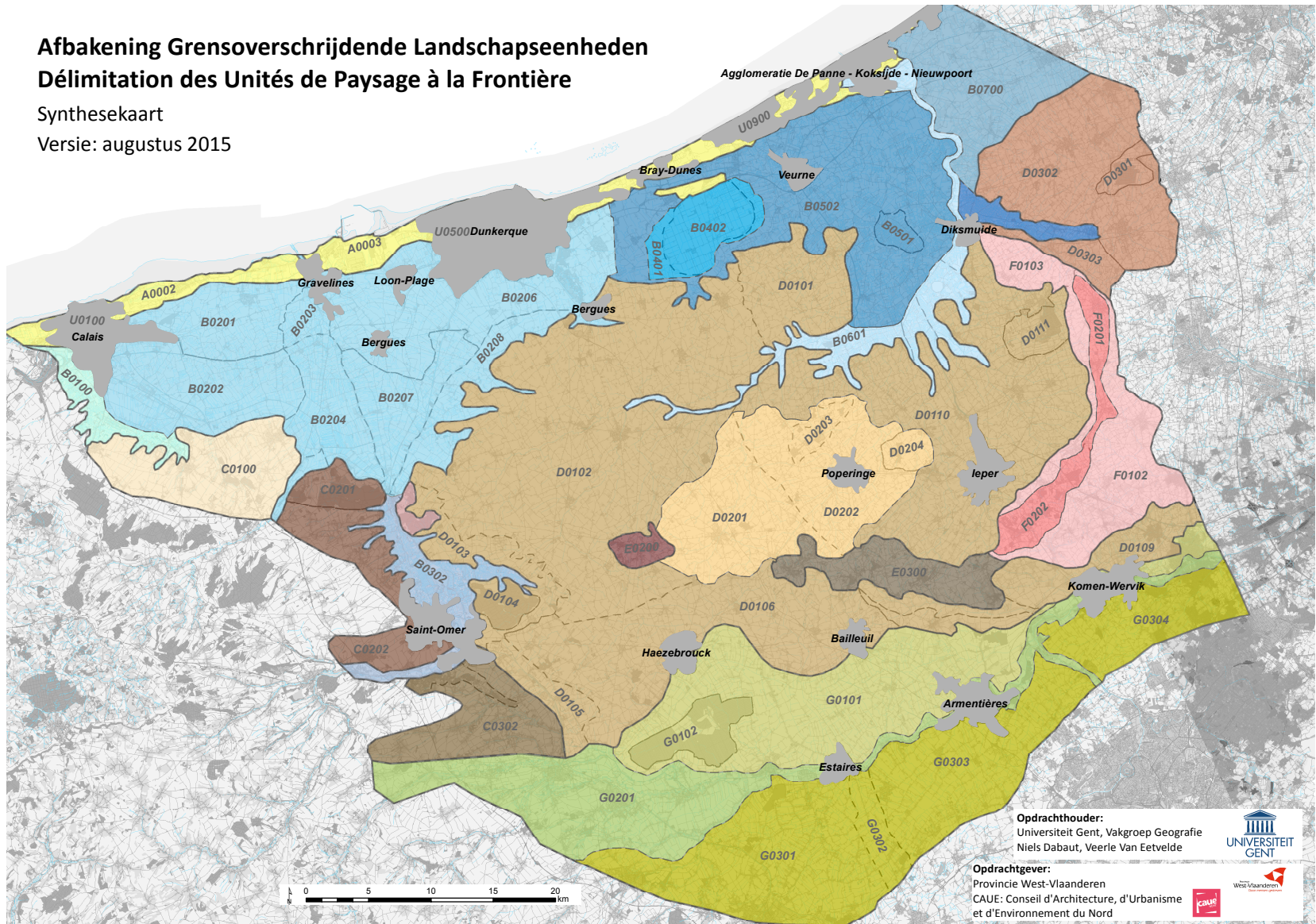


SYNTHESIS MAP

Afbakening Grensoverschrijdende Landschapseenheden Délimitation des Unités de Paysage à la Frontière

Synthesekaart

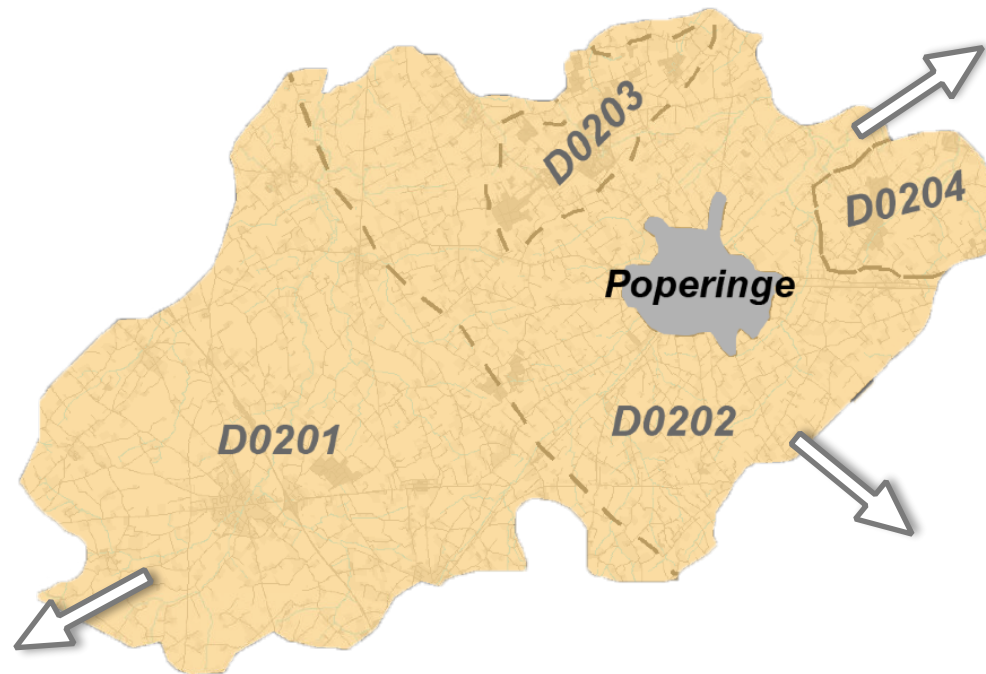
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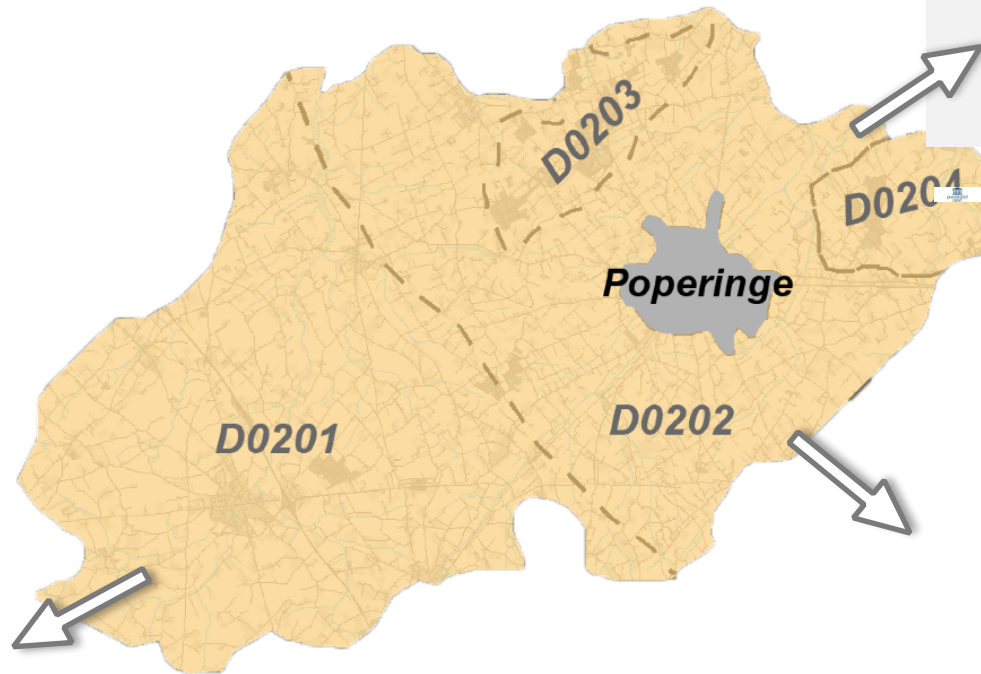
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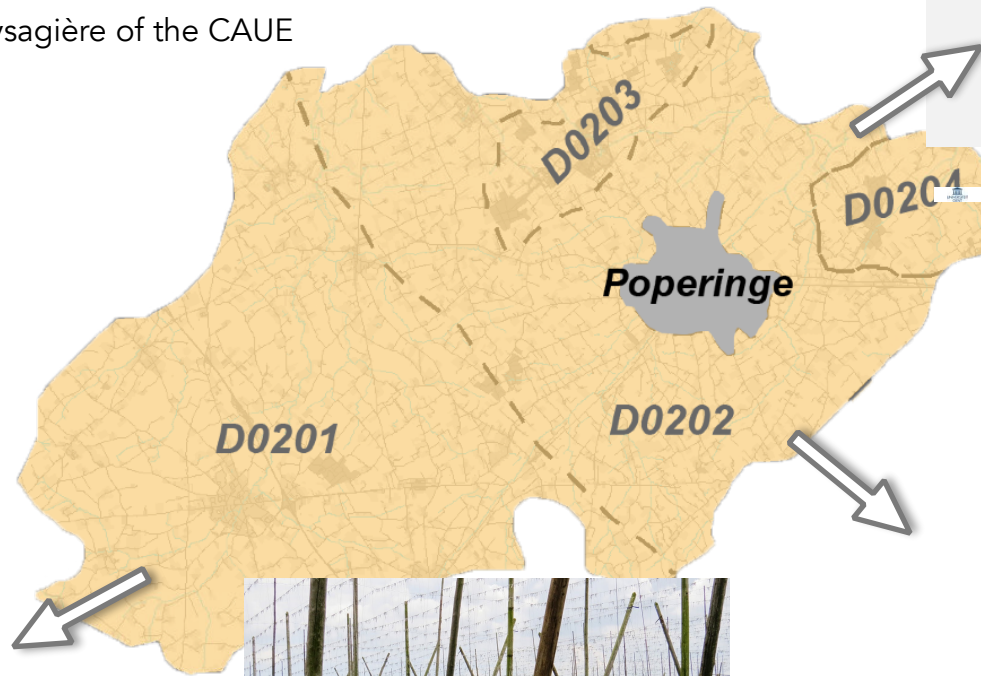
Code	Regio		
D0201	België/Frankrijk		
Naam/Nom			
Pays d'Hobbelon de Steenvoorde			
Nom:			
Hoppeland van Steenvoorde			
Toponiem:	Steenvoorde	Criterium	Perceelstructuur
Toponiem 2:	Watou	Criterium Notities:	
Toponiem 3:	Houtlerque	Franse deel van het Hoppeland, door de grotere perceelstructuur is het duidelijk dat de hoppelteelt hier op de achtergrond is gekomen	
Toponiem 4:	Winnezele		
Toponiem 5:	Godwaersvelde		
Toponiem 6:	Abele		
Visueel:	Open landschap	Uitzonderlijke dominante beeld	Repetitieve kenmerken
Visueel Notities:	Open landschap, maar de bossen, heuvels en verspreide bebouwing zorgt voor weinig verscheidenheid		
Fysisch:	Zacht golvend	Kleine beken	
Fysisch Notities:			
Historisch:	Akterland	Landbouw	Verspreide bebouwing
Historisch Notities:			
Bodem:	Zandteem	Zand	Lemig zand
Bodem Notities:			
Geologie:	Eoceen	Quartaire bedekking	
Geologie Notities:			
Ruimtelijke Structuur:	A25 of E42 als belangrijkste lijnstructuur in de eenheid, deze knuist de eenheid van noord naar zuid, terwijl de D948, dit doet van west naar oost		

Code	Regio		
D0203	België		
Naam/Nom			
Bosson rond Proven			
Nom:			
Bois autour de Proven			
Toponiem:	Bardelembos	Criterium	Visueel
Toponiem 2:	Doringem	Criterium Notities:	
Toponiem 3:	De Lijpe		
Toponiem 4:	Sint Jan ter Beem		
Toponiem 5:	De Nachtaga		
Toponiem 6:			
Visueel:	Gesloten	Verstoord door bossen	
Visueel Notities:			
Fysisch:			
Fysisch Notities:			
Historisch:	Bosbouw	Ontboste gebieden rondom	
Historisch Notities:			
Bodem:	Zandteem	Zand	Lemig zand
Bodem Notities:			
Geologie:	Eoceen	Quartaire bedekking	
Geologie Notities:			
Ruimtelijke Structuur:			

Code	Regio		
D0202	België		
Naam/Nom			
Hoppeland van Poperinge			
Nom:			
Hoppeland van Poperinge			
Toponiem:	Poperinge	Criterium	Perceelstructuur
Toponiem 2:	Abele	Criterium Notities:	
Toponiem 3:	Proven	Belgische deel van het hoppeland, nog steeds actieve hoppelteelt, ook is de perceelstructuur zichtbaar	
Toponiem 4:	Brandhoek		
Toponiem 5:	Wuffhulle		
Toponiem 6:	Witte Huzen		
Visueel:	Open landschap	Uitzonderlijke dominante beeld	Repetitieve kenmerken
Visueel Notities:	Open landschap, maar de bossen, heuvels en verspreide bebouwing zorgt voor weinig verscheidenheid		
Fysisch:	Zacht golvend	Kleine beken	
Fysisch Notities:			
Historisch:	Hoppelvelden	Landbouw	Verspreide bebouwing
Historisch Notities:			
Bodem:	Zandteem	Zand	Lemig zand
Bodem Notities:			
Geologie:	Eoceen	Quartaire bedekking	
Geologie Notities:			
Ruimtelijke Structuur:	De Hoppelvelden en de weg tussen Poperinge en Steenvoorde zijn structurele elementen in het landschap.		

SYNTHESIS MAP

- Description of all units in a GEO database
- Information can be added or adapted anytime and by anyone
- Pictures can be added to the database
- Link with Observatoire Paysagère of the CAUE



Code	Regio		
D0201	België/Frankrijk		
Naam/Nom			
Pays d'Hobbelon de Steenvoorde			
Nom:			
Hoppeland de Steenvoorde			
Naam:			
Hoppeland van Steenvoorde			
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Fysisch:	Zacht golvend	Kleine beken	
Fysisch Notities:			
Historisch:	Akkerland	Landbouw	Verspreide bebouwing
Historisch Notities:			
Bodem:	Zandteem	Zand	Lemig zand
Bodem Notities:			
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Geologie Notities:			
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Code	Regio		
D0203	België		
Naam/Nom			
Bossen rond Proven			
Nom:			
Bois autour de Proven			
Naam:			
Bossen rond Proven			
Toponiem:	Bardelembos	Criterium	Visueel
Toponiem 2:	Ooringem	Criterium Notities:	
Toponiem 3:	De Lijpe		
Toponiem 4:	Sint Jan ter Beem		
Toponiem 5:	De Nachtagae		
Toponiem 6:			
Visueel:	Gesloten	Verstoord door bomen	
Visueel Notities:			
Fysisch:			
Fysisch Notities:			
Historisch:	Bosbouw	Oriboste gebieden rondom	
Historisch Notities:			
Bodem:	Zandteem	Zand	Lemig zand
Bodem Notities:			
Geologie:	Eocene	Quaartaire bedekking	
Geologie Notities:			
Ruimtelijke Structuur:			

Code	Regio		
D0202	België		
Naam/Nom			
Hoppeland van Poperinge			
Nom:			
Hoppeland van Poperinge			
Naam:			
Hoppeland van Poperinge			
Toponiem:	Poperinge	Criterium	Perceelstructuur
Toponiem 2:	Abele	Criterium Notities:	
Toponiem 3:	Proven	Belgische deel van het hoppeland, nog steeds actieve hoppelteelt, ook is de perceelstructuur zichtbaar	
Toponiem 4:	Brandhoek		
Toponiem 5:	Wulfhulle		
Toponiem 6:	Witte Huzen		
Visueel:	Open landschap	Uitzonderlijke dominante beeld	Repetitieve kenmerken
Visueel Notities:	Open landschap, maar de bossen, heuvels en verspreide bebouwing zorgt voor weinig verscheidenheid		
Fysisch:	Zacht golvend	Kleine beken	
Fysisch Notities:			
Historisch:	Hoppelvelden	Landbouw	Verspreide bebouwing
Historisch Notities:			
Bodem:	Zandteem	Zand	Lemig zand
Bodem Notities:			
Geologie:	Eocene	Quaartaire bedekking	
Geologie Notities:			
Ruimtelijke Structuur:	De Hoppelvelden en de weg tussen Poperinge en Steenvoorde zijn structurele elementen in het landschap.		

RECOMMENDATIONS FOR IMPLEMENTATION

- ▶ **Base to formulate future transborder landscape visions**
- ▶ Start to create a **Landscape observatory**
- ▶ Source of knowledge to increase **public awareness**
- ▶ Input for the development of an **open source application**
- ▶ Landscape characterisation as a start for detailed analyses and description (landscape biographies)



CHeriScape V - Newcastle (UK)

14-15-16 June 2016

'LANDSCAPE IN IMAGINATION AND THE VIRTUAL FUTURE'

Information at www.cheriscape.eu





Thank You!



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